

IN THE SPECIFICATION

Please amend the paragraph extending from page 6, line 16 to page 7, line 6 as follows:

Turning to FIG. 1 and FIG. 4, the method of forming the isolation film according to the preferred embodiment of the present invention employs porosity formation by the electrochemical etch process. The process of forming the porosity is performed using a solution where 49% HF and ethanol are mixed as an electrolyte 160 while the ultraviolet rays 152 of a given wavelength are illuminated using the ultraviolet ray source 150. The work electrode used in the electrochemical etch process is the silicon wafer (W), a hydrogen standard electrode is used as the reference electrode 140 and a platinum electrode is used as the counterpart electrode 130. Reactive activation energy necessary for a dissociation reaction of silicon is supplied by applying the voltage (V) by which silicon could be dissociated to the work electrode. In order to prevent hindrance of the silicon dissociation reaction by generation of a hydrogen gas when the silicon dissociation reaction occurs, the hydrogen gas is removed from the reaction surface by adding an inert gas such as argon (Ar) to the electrolyte 160 and then ~~bobbling~~ bubbling it through the electrolyte.

Please amend the paragraph extending from page 7, line 22 to page 8, line 6 as follows:

Hydrogen is generated by a series of reaction, partial dissociation occurs on the silicon surface by continuous attack of F⁻ and a new surface is thus created. This change causes to vary distribution of an electric field on the silicon surface. As the hole is supplied from a bulk region of silicon to a portion where silicon is dissociated by this change of the electric field, the trench 112 is formed in a vertical direction parallel to a direction along which the hole is supplied as shown in FIG. 5. Porosities 110 are formed at the silicon substrate 100 being a region where the isolation region will be formed through this electrochemical etch as shown in FIG. 4.

Please amend the paragraph extending from page 7, line 22 to page 8, line 6 as follows:

Referring to FIG. 5, the photoresist pattern 106 is removed. At this time, the photoresist pattern may be removed under an O_2 atmosphere by means of an ashing process. After porous silicon is formed through electrochemical etch, a thermal oxidization process is performed to form an oxide film. At this time, the thermal oxidization process may employ a wet oxidization mode. The thermal oxidization process is implemented at a temperature of about $700\sim 900^\circ C$ under O_2 and H_2 atmosphere. As such, if porous silicon is oxidized by the thermal oxidization process after porous silicon is formed through electrochemical etch, O_2 or H_2O being an oxidizing agent is diffused into the Si/SiO_2 interface where Si reacts to H_2O or O_2 to form SiO_2 . Therefore, as silicon is consumed while the oxide film is grown, both the porosity and silicon could be formed to be the oxide film by controlling the size of the porosity and the degree of the porosity. If porous silicon is formed to be the oxide film by this method, it could be used as the isolation film of the semiconductor device.